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EXAMINER

MAIS, MARK A

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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05/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/629,707

Applicant(s)

MA ET AL.

Examiner

Mark A. Mais

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 depends from cancelled claim 1. There is insufficient antecedent basis for this limitation in the claim. Correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 2-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Art Unit: 2616

5. Specifically, the claims refer to a single coder/decoder, which selectively inputs one of a plurality of digital/analog signals. The coder/decoder is not disclosed to contain such logic or processing capability [i.e., to selectively input one of a plurality of digital/analog signals].

Moreover, Applicants specification specifically states that it is the combination of the processor 22 and CODEC 30 [Fig. 1], which performs the selection of inputs [**Applicant's specification, page 4, line 22 through page 5, line 4**]. Correction is required. For examination purposes, it will be interpreted as the combination of a coder/decoder and a controlling processor.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 2-7 rejected under 35 U.S.C. 102(b) as being anticipated by Huang (WO 97/23078).

8. With regard to claim 2, Huang discloses a multiprocessor digital signal processing system comprising:

Art Unit: 2616

a plurality of processors **[the plurality of processors is not linked to the rest of the claim; therefore, it is afforded minimal patentable weight];**

a single coder/decoder **[as stated above, interpreted as the combination of coder/decoder and a controlling processor]** to selectively input one of a plurality of analog signals and to selectively output an encoded signal to said plurality of processors through a time division multiplexed channel **[col. 8, lines 5-10]** connecting said single coder/decoder to said plurality of processors **[Fig. 3a, interpreted by the examiner as only one A/D & DA combination in subsystem 13; the reason Fig. 3a shows more than one A/D & D/A (1 pair) is because it was designed with two digital trunks—however, each one of these digital trunks provides a plurality of digital signals];**

means for individually selecting input digital signals and analog signals for digital/analog conversion and analog/digital conversion, respectively **[col. 9, lines 1-10];** and

means for assigning which of said plurality of processors is coupled to said single digital/analog conversion channel **[Fig. 3b, routing resolution].**

9. With regard to claim 3, Huang discloses a digital signal processing system comprising:

a single coder/decoder **[as stated above, interpreted as the combination of coder/decoder and a controlling processor]** to selectively input one of a plurality of digital signals, to selectively input one of a plurality of analog signals, to communicate with a single digital/analog conversion channel, and to communicate with a single analog/digital conversion channel **[Fig. 3a, interpreted by the examiner as only one A/D & DA combination in subsystem 13; the reason Fig. 3a shows more than one A/D & D/A (1 pair) is because it was**

Art Unit: 2616

designed with two digital trunks—however, each one of these digital trunks provides a plurality of digital signals];

a first source of an analog input signal coupled to said analog signal input of said single coder/decoder [Fig. 3a, interpreted by the examiner as only one A/D & DA combination in subsystem 13; the reason Fig. 3a shows more than one A/D & D/A (1 pair) is because it was designed with two analog trunks—however, each one of these analog trunks provides a plurality of digital signals];

a second source of digital input signals coupled to said digital signal input of said single coder/decoder [Fig. 3a, interpreted by the examiner as only one A/D & DA combination in subsystem 13; the reason Fig. 3a shows more than one A/D & D/A (1 pair) is because it was designed with two digital trunks—however, each one of these digital trunks provides a plurality of digital signals];

a first plurality of processors multiplexed to said single coder/decoder [gateway computers 3,6]; and

means for time division multiplexing said first plurality of processors to said single coder/decoder [Fig. 3b, routing resolution].

10. With regard to claim 6, Huang discloses a plurality of registers to buffer digital signal data from said single coder/decoder to each of said first plurality of processors **[it is inherent that each digital trunk must contain a plurality of registers/queues/buffers]**.

11. With regard to claim 7, Huang discloses means for individually selecting time slots for

Art Unit: 2616

digital signals from each of said first plurality of processors to access said digital signal input of said coder/decoder **[Fig. 3b, routing resolution; also, it is inherent that a coder/decoder or multiplexer must select timeslots of each input]**.

Allowable Subject Matter

12. Claim 5 is allowable if the 35 USC 112 rejection is overcome.

13. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims [if the 35 USC 112 rejection is overcome].

Response to Arguments

14. Applicant's arguments with respect to claims 2-7 have been considered but are moot in view of the new grounds of rejection.

Conclusion

Art Unit: 2616

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Mais whose telephone number is 572-272-3138. The examiner can normally be reached on M-Th 5am-4pm.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAM
April 12, 2007

Seema S. Rao
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